

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/682,131	10/09/2003	Jerry I. Jacobson	35733-293661	1354
7590 04/26/2006			EXAMINER	
Cynthia B. Rothschild, Ph.D.			KAHELIN, MICHAEL WILLIAM	
Kilpatrick Stock	kton LLP			
1001 West Fourth Street			ART UNIT	PAPER NUMBER
Winston-Salem, NC 27101-2400			3762	
			DATE MAILED: 04/26/2006	

Please find below and/or attached an Office communication concerning this application or proceeding.

Application No. Applicant(s)	
10/682,131 JACOBSON ET AI	L.
Office Action Summary Examiner Art Unit	· · · · · · · · · · · · · · · · · · ·
Michael Kahelin 3762	
The MAILING DATE of this communication appears on the cover sheet with the correspondence ad Period for Reply	dress
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30 WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filled after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).	
Status	
1) Responsive to communication(s) filed on 15 December 2005.	
2a) This action is FINAL . 2b) ☑ This action is non-final.	
3) Since this application is in condition for allowance except for formal matters, prosecution as to the	e merits is
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.	
Disposition of Claims	
4) Claim(s) 1-18,20 and 22 is/are pending in the application.	
4a) Of the above claim(s) <u>1-16</u> is/are withdrawn from consideration.	
5) Claim(s) is/are allowed.	
6)⊠ Claim(s) <u>17,18,20 and 22</u> is/are rejected.	
7) Claim(s) is/are objected to.	
8) Claim(s) are subject to restriction and/or election requirement.	
Application Papers	
9) The specification is objected to by the Examiner.	
10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.	
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).	TD 4 424/d\
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CF	
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form P1	0-132.
Priority under 35 U.S.C. § 119	
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).	
a) All b) Some * c) None of:	
 Certified copies of the priority documents have been received. 	
2. Certified copies of the priority documents have been received in Application No	
3. Copies of the certified copies of the priority documents have been received in this National	Stage
application from the International Bureau (PCT Rule 17.2(a)).	
* See the attached detailed Office action for a list of the certified copies not received.	
Attachment(s)	
1) Notice of References Cited (PTO-892) 4) Interview Summary (PTO-413)	
2) Notice of Draftsperson's Patent Drawing Review (PTO-948) Paper No(s)/Mail Date.	O 152)
3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 5) Notice of Informal Patent Application (PTO Other:	J-102)
U.S. Patent and Trademark Office	

Application/Control Number: 10/682,131 Page 2

Art Unit: 3762

DETAILED ACTION

Claim Rejections - 35 USC § 103

- 1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 2. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).
- 3. Claim 22 is rejected under 35 U.S.C. 103(a) as being unpatentable over Jacobson (US 6,004,257, hereinafter "Jacobson") in view of Denker et al. (US 2005/0060011, hereinafter "Denker"). Jacobson discloses the essential features of the claimed invention including the following: a device for stimulating organ operation (specifically improving the functional ability of the heart (col. 7, line 24)) comprising a means for inducing an electric current in a solenoid coil for emitting EMFs with the claimed magnetic flux density and frequency (abstract) external to the organism (Fig. 3).

Art Unit: 3762

Furthermore, the generator comprises a second (external) solenoid (6), an attenuator (1, i.e. the water contained in the tank), and a signal generator (3). Please note that the generator of Jacobson is capable of inducing an electric current in a solenoid coil for emitting EMFs with the claimed magnetic flux density and frequency because the magnetic flux permeates the subject's entire body (Fig. 3). Jacobson does not disclose a first solenoid operatively coupled to a capacitor. Denker teaches of providing a first solenoid operatively coupled to a capacitor (par. 0027) in the form of a stent (Fig. 2) to remotely provide pacing therapy to a heart and serve as an antenna for a device external to the first solenoid.

4. Claims 17, 18, and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jacobson in view of Denker and Schauerte (US 2002/0026228, hereinafter "Schauerte"). The invention of Jacobson, as modified above, discloses the essential features of the claimed invention, including an attenuator operatively coupled to the control circuitry (Denker, par. 0027), but does not disclose a second solenoid, with a first wire, second wire, and attenuator, and further comprising a catheter removably insertable into the first solenoid. Schaurte teaches of providing a first solenoid coil (Fig. 11, element 2.11) with a second solenoid (7) having a first wire (unlabelled left straight section of coil), a second wire (unlabelled right straight section of coil), and a signal generator (10) external to the body (par. 0018) to induce a stimulation current or magnetic field without a mechanical connection and avoid the complications associated with a bulky implant, and further comprising a catheter removably inserted into the first solenoid to provide stimulation energy to the first solenoid (Fig. 11) via a

Application/Control Number: 10/682,131

Art Unit: 3762

conventional vascular catheterization. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to further modify Jacobson's invention by providing a first solenoid coil with a second solenoid having a first wire, a second wire, and a signal generator external to the body to induce a stimulation current or magnetic field without a mechanical connection and avoid the complications associated with a bulky implant, and further comprising a catheter removably inserted into the first solenoid to provide stimulation energy to the first solenoid via a conventional vascular catheterization. In regards to the first and second wires, it is, alternatively, well known in the art, if not necessary that a solenoid comprises a first and second wire to complete the circuit necessary to induce a magnetic field. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the modified invention of Jacobson with a first and second wire to complete the circuit necessary to induce a magnetic field.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Kahelin whose telephone number is (571) 272-8688. The examiner can normally be reached on M-F, 9-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Angela Sykes can be reached on (571) 272-4955. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3762

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

NL JL 4/25/06

GEORGE R. EVANISKO 4/25/6